



ISO 294-4, 2577

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# **CELANEX<sup>®</sup> 2302 GV1/45**

#### **CELANEX® PBT**

Celanex 2302 GV1/45 is a 45% glass fiber reinforced Polybutylene terephthalate polymer blend with PET, which provides excellent stiffness and good surface appearance.

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Resin Identification	(PBT+PET)-GF4	ISO 1043
Part Marking Code	5 >(PBT+PET)-GF45<	ISO 11469
Rheological properties		
Melt volume-flow rate	7 cm <sup>3</sup> /10min	ISO 1133
Temperature	265 °C	
Load	2.16 kg	

0.1 - 0.2 %

0.3 - 0.7 %

#### Typical mechanical properties

Moulding shrinkage range, parallel

Moulding shrinkage range, normal

Tensile modulus	16000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	170 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.8 %	ISO 527-1/-2
Charpy notched impact strength, 23°C	10.5 kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	10.5 kJ/m <sup>2</sup>	ISO 179/1eA
Ball indentation hardness, H 961/30	240 MPa	ISO 2039-1
Poisson's ratio	0.33 <sup>[C]</sup>	

[C]: Calculated

### Thermal properties

Temperature of deflection under load, 1.8 MPa	205 °C	ISO 75-1/-2
Coefficient of linear thermal expansion	15 E-6/K	ISO 11359-1/-2
(CLTE), parallel		

Flammability

Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	0.8 mm	IEC 60695-11-10

#### Physical/Other properties

Humidity absorption, 2mm	0.15 %	Sim. to ISO 62
Water absorption, 2mm	0.4 %	Sim. to ISO 62
Density	1680 kg/m³	ISO 1183

## Injection

Drying Recommended	yes
Drying Temperature	120 °C
Drying Time, Dehumidified Dryer	4 h
Processing Moisture Content	≤0.02 %
Melt Temperature Optimum	265 °C
Min. melt temperature	255 °C
Max. melt temperature	275 °C

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Revised: 2025-05-16 Source: Celanese Materials Database





## **CELANEX®** 2302 GV1/45

#### **CELANEX® PBT**

Screw tangential speed 0.1 - 0.3 m/s
Mold Temperature Optimum 100 °C
Min. mould temperature 90 °C
Max. mould temperature 130 °C
Back pressure 3 MPa

#### Characteristics

Processing Injection Moulding

Delivery form Pellets

Additives Release agent

Special characteristics Heat stabilised or stable to heat, High Gloss

#### Automotive

OEM ADDITIONAL INFORMATION

General Motors Jet Black; Special Parts Appproval - see your

CE Account Representative for fuether details.

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